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AUTHOR Laanan, Frankie Santos
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ABSTRACT

This study compared the outcomes and experiences of 275 older and 442 younger liberal arts students who had transferred from California community colleges to a research I California university in fall 1994 and spring 1995. The study's conceptual perspective was that of "quality of effort," which considers both what the institution offers and what students do with these offerings. Subjects completed a 304-item Transfer Students' Questionnaire which was organized into three main sections: (1) social demographics; (2) community college experiences; and (3) university experiences. Findings suggest that younger students and older students are likely to have different experiences at the two- and four-year institutions in their level of effort, involvement, and perceptions. At the community college level both younger and older groups had similar grade point averages (GPAs), but younger students spent more time in social and extracurricular activities. Older students scored significantly higher in the "course learning" and "experience in writing" factors. At the university, older students had significantly higher GPAs, devoted more effort to their experiences with faculty and course learning, and were more satisfied with their overall experiences, whereas younger students continued to be more involved in social and extracurricular activities and were less satisfied overall. (Contains 22 references and 7 tables.) (DB)

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# Does Age Matter? A Study of Transfer Students' College Experience and Adjustment Process

Frankie Santos Laanan, Ph.D.
Senior Research Analyst
Vocational Education and Institutional Research
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626
Phone: (714) 438-4706

**AFTER JULY 10, PLEASE SEND CORRESPONDENCE TO:**

Frankie Santos Laanan, Ph.D.
Assistant Professor, Community College Leadership
Department of Human Resource Education
College of Education
University of Illinois at Urbana-Champaign
345 Education Building
1310 South Sixth Street
Champaign, IL 61820
Phone: (217) 333-0807

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Does Age Matter? A Study of Transfer Students' College Experience and Adjustment Process

## PAPER ABSTRACT

Today, there are a growing number of older students taking courses in community colleges. For older students who pursue the liberal arts curriculum and matriculate to a four-year institution, there has been growing interest among researchers to better understand their college experiences, both cognitive and affective. Using Pace's concept of Quality of Effort, a comparative analysis between older (n=275) and younger (n=442) students was conducted. The findings suggest that younger students are likely to have different experiences at the two- and four-year environments compared to their counterparts in their level of effort, involvement, and perceptions. This study has policy implications for both the two- and four-year segments in the role that academic counseling, faculty, and student affairs professionals play in students' preparation and transition at the senior institution.

Does Age Matter? A Study of Transfer Students' College Experience and Adjustment Process

## INTRODUCTION

The nation's 1,100 community colleges educate a diverse population in terms of cultural and ethnic backgrounds and social demographics. Among minorities, community colleges are the schools of choice (American Association for Community College, 1997). Almost 50% of all minority undergraduates enroll each fall in higher education. Because of their flexible schedules and diverse curriculum, this segment attracts students with different needs (Cohen & Brawer, 1996). One unique characteristic of this segment is the constituent it serves – enrollment of older students (or non-traditional age). Today, there are more older students taking courses than there were before. The latest statistic shows that the average age nationally is 29. These students typically are employed full-time and are returning to college to pursue a variety of objectives: workforce development, retraining, or transfer. For older students who pursue the liberal arts curriculum and eventually matriculate to a four-year institution, there has been a growing interest among researchers to better understand their college experiences, both cognitive and affective.

The experiences of community college transfer students at the senior institution have been well documented by studies characterizing their adjustment process at transfer shock (Diaz, 1992; Hill, 1965; and Keeley & House, 1993). These studies found that transfer students tend to experience a temporary dip in grades during their first or second semester after transferring to a senior institution. The majority of the research in this area focuses on the differences between native (those who entered as a freshman) and transfer students' academic achievement as measured by traditional GPA (Best & Gehring, 1993; Graham & Hughes, 1994). Considered to be a popular paradigm in the research literature, the transfer shock concept only describes the cognitive outcome (or GPA) of transfer students' academic adjustment at the four-year

institution (Laanan, 1998). Because of the growing number of older students attending post-secondary education, research that focuses on their affective outcomes is warranted. Further, by examining new constructs to measure these complex dimensions, the goal of this study is to fill a void in the literature about the experiences of students at the two- and four-year environments by age.

## LITERATURE REVIEW

### Research on Age Differences

According to Cross (1980), a non-traditional student is defined as an adult who returns to school full- or part-time while maintaining responsibilities such as employment, family, and other responsibilities of adult life. The majority of the research on college students has focused on traditional age students, those who begin their postsecondary education immediately after high school. These students are considered "traditional" because of their age. In the last decade, increased attention has been paid to the outcomes of non-traditional students in colleges and universities. Because of the dramatic shifts in the characteristics and requirements of college-going students, suggestions have been made about how to reshape higher education's learning delivery system (Moss, 1995). Over the last 20 years, the percentage of older students on campuses has increased dramatically (Benshoff, 1993). One-third to one-half of all students are classified as non-traditional and more than 50% of all graduate students are over 30 years of age (Asalanian & Brickwell, 1980).

*Characteristics of Non-Traditional Students.* Specific characteristics separate non-traditional students and traditional students. Non-traditional students tend to be achievement oriented and highly motivated (Cross, 1980). They prefer more active approaches to learning

and they value opportunities to integrate academic learning with their life and work experiences (Benshoff, 1991). Additional factors, which distinguish non-traditional students from traditional students (Richter-Antion, 1986), include stronger consumer orientation (education is an investment); multiple non-school-related commitments and responsibilities; lack of an age cohort; and limited social acceptability and support for their student status (operating outside of traditional adult role).

Using data from the 1989-90 National Postsecondary Student Aid Study and the 1990-92 Beginning Postsecondary Student Longitudinal Study, Choy and Premo (1995) examined the participation of older undergraduates. The study provided a profile of older undergraduates and compared them with younger students on several demographic and socio-economic characteristics. The authors found that in 1989-90, about 42% of all undergraduates were 24 years or older and that a majority of older undergraduates were married and had dependents other than a spouse. Further, about 59% of older undergraduates attended a public less-than-four-year institution, compared with 33% of younger undergraduates.

Research focusing specifically on the retention of non-traditional students has emerged. A handful of research has examined the effects of a community in relation to degree attainment among adult undergraduates (Naretto, 1995). That is, to what extent does membership in communities internal and external to an institution of higher learning influence older undergraduates' persistence or non-persistence? The findings suggest that membership in a supportive community is an important factor in explaining persistence. Other quantitative and qualitative studies have examined the role that college administrators and faculty plays in providing services for non-traditional students (Allen, 1993; Kinnick & Ricks, 1993) to improve student retention. Another study designed a conceptual model to empirically test the underlying

factors that constitute retention decisions among non-traditional students (Villela & Hu, 1991). The authors found that the reality of time constraints and academic rigor when compared with the expectations of college could lead to student stress and dissatisfaction.

Studies about non-traditional students' perceptions of their college experiences such as student learning, barriers and adjustment process have been examined. McCormick (1995) discovered that non-traditional students had concerns regarding advisement, registration, and financial aid and that their goals were more related to attaining their degree and obtaining career counseling rather than participating in typical "college activities." Similarly, Shankar (1994) collected data using case study methods of non-traditional students at two mid-western universities. The findings that emerged could fit into various categories: curriculum, assignments, social isolation, classroom structure, and interpersonal communication. In general, non-traditional students had strong opinions that the curriculum and assignments were not designed for them in mind, and that they often felt socially isolated because of their age and because they tend to be commuter students.

Studies pertaining to non-traditional students' adjustment process have examined predictors and consequences of psychological adjustment (Chartrand, 1992). The author found factors that non-college environmental variables, such as family support, and career-related academic variables were predictive of institutional commitment and absence of psychological distress, which in turn predicted intended continuance in school.

*College Experience of Traditional versus Non-Traditional Students*. In a three-year study, Slotnick et al. (1993) compared older-than-average full-time students at University of North Dakota to traditional-age students. The authors found that compared to traditional students, older students spent more hours working at outside jobs and domestic responsibilities,

and experienced more difficulty in balancing home, work and family. Although most traditional students attend college so they can embark on a first career, older students attend college because they are either changing careers or wish to gain new skills and knowledge to be used in their present jobs. In terms of academic experiences, traditional students prefer that instructors' assessments tell not only how well they did on a task, but also how they are doing relative to peers. In comparison, older students favor feedback that assesses their skill and growth as individuals. In another study, Butler and Markley (1993) compared traditional age (24 years old or younger) freshmen to non-traditional (25 or older) freshmen by examining Chickering's psychosocial developmental characteristics. Using the Student Development Task and Lifestyle Inventory (SDTLI), the authors found that non-traditional students appeared to function at a higher level than traditional freshmen on most of the measures.

## CONCEPTUAL PERSPECTIVE

### Quality of Effort

A conceptual perspective that is helpful for this study is Pace's (1980, 1984) concept of "Quality of Effort" (QE). Using the College and University Environment Scales (CUES), George Stern and C. Robert Pace are credited to have pioneered the concept of QE and its effects on various outcomes by examining the "environmental press" as a factor in student development. After 20 years of using the CUES, which focused on institutional accountability, Pace modified his environmental analysis to include student accountability. According to Pace (1982, p. 4), "accountability for achievement and related student outcomes must consider both what the institution offers and what the students do with those offerings." This conceptual perspective gave rise to the new measurement devise called QE. The instruments prior to the QE focused on

the environment, which attempted to evaluate the places where certain types of developmental activities transpired (e.g., classrooms, libraries, laboratories, student unions, etc.). Building from this premise, the purpose of the QE instrument was to measure student behavior within those settings to assess the level of effort and to correlate that effort with an outcome measure.

The underlying principle of the QE is that what a student gets out of college is dependent not only upon what the college does or does not do but also on the extent and quality of effort that the student puts into college. To assess students' level of involvement, Pace developed the College Student Experiences Questionnaire (CSEQ). This instrument includes fourteen quality of effort scales that estimates a student's use of an institution's facilities and opportunities. These scales cover a broad range of student activities including library experiences, course learning, experiences in writing, the student union, experiences with faculty, topics of conversation, and personal experiences. For each scale, students are asked to report the *frequency* with which they did a variety of activities. The activities represent varying levels or qualities of experience that "reflects a unidimensional hierarchy, meaning they are interdependent, in the sense that engagement in the higher quality and most difficult activities subsumes engagement in the lower quality or easier activities (Pace, 1984, p. 11). The conceptual origins of the CSEQ derived from a variety of views and concepts about the nature of higher education, about accountability, about student learning and development, and about the need for new measures in the evaluation of higher education programs.

The concept of quality is based on two perspectives. First, education is both a process and a product. Typically, when educational programs are evaluated, the view has been to think of education as a product (e.g., knowledge acquisition, improvement of skills, attitudes and values modified, and personal traits developed). This rationale gave rise to Pace's notion that the

quality of the educational experience or process should also be accounted for. That is, it is equally important to measure the quality of the process as well as the quality of the product. Second, all learning and development require an investment of time and effort by the student (1984, p. 5). *Time* is a frequency dimension, while *effort* is a quality dimension. Pace posits that quality of experience and quality of effort are similar concepts, connected with one another in that the likelihood of having high quality of effort depends on investing high quality of effort.

## Application of Quality of Effort

Pace's QE framework enhances the understanding of student development. As applied to this study, it is important to consider the process by which students are involved or engaged in certain academic and social activities. Further, all learning and development requires an investment of time and effort by the students. For transfer students, the extent to which they are involved and spend quality time in various activities will impact outcomes that include satisfaction, involvement, and adjustment. This framework enables the researcher to measure students' use of campus facilities and opportunities provided by the college for their learning and development, thus, taking the responsibility from the institution and making students accountable for their actions. It is important; however, to take into account the unique environment of the community college and the extent to which it differs from a four-year university. This study seeks to identify if whether the amount, scope, and quality of students' effort is a key to identifying the quality of the educational process.

## PURPOSE OF THE STUDY

The purpose of this study is to understand and describe the extent to which transfer students differ in their academic and college experiences by age group (i.e., traditional versus non-traditional). For this study, traditional age is defined as 24 or below (or younger) and non-traditional is defined as 25 and over (or older). This study sought to address the following research question: *How do students differ in their community college and university experiences by age group? Specifically, to what extent are there statistically significant age group differences in terms of level of involvement, quality of effort, general perceptions, and academic and social adjustment process among younger and older transfer students?*

## METHODOLOGY

### Data Source

The target population for this study included 2,369 students who transferred in spring and fall 1994 and 1995 from California Community Colleges to a Research I University, located in Southern California. The population was identified from reports generated by the registrar's office.

### Survey Instrument and Response Rate

Data were collected using a survey instrument. The 304-item Transfer Students' Questionnaire (TSQ) was formulated as a result of extensive review of past survey instrument and previous studies in this area (Astin, 1993; Baker & Siryk, 1986; Pace, 1984, 1990, 1992). This study measured transfer students' non-cognitive or affective traits: attitudes, values, and interests in different areas. The survey instruments were mailed to students' home address

during week three of fall quarter 1996. Students were given a deadline of three weeks from receipt to return the instrument. The instrument was accompanied by a cover letter from a University official encouraging students to participate in the study. To facilitate a high response rate, a complimentary Business Reply Envelope was provided. Subsequent follow-ups were conducted for students who did not respond to the initial mailing.

The TSQ is organized in three main sections: (1) social demographics; (2) community college experiences; and (3) University experiences. The social demographics component includes questions about transfer institution, high school GPA, age, racial/ethnic identification, sex, hours working on a job during school, place or residence, educational attainment of parents, degree aspirations, and parental income level.

The community college component covered two broad area: college experiences and college activities. Under this category, questions focused on areas such as hours spent on campus, class preparation, and working at a job for pay; GPA; degree attainment; and enrollment in honors courses. Questions also included students' experiences with courses, academic counseling, transfer process, and transfer center. The community college activity section probed students' quality of effort and involvement in course learning, experiences with faculty, clubs and organizations, and writing.

The University component covered two broad areas: university experiences and university activities. The University experiences covered items such as undergraduate major; GPA; reason for attending university. The college activity section included five broad areas: experiences with faculty, clubs and organizations, course learning, involvement activities, and academic counseling services. Statements about students' general perceptions, and adjustment process were also included.

A total of 727 students returned the completed questionnaire, and of these 10 questionnaires were not included in the data analysis due to insufficient information. The final sample was comprised of 717 students, which yielded a response rate of 30%. These students transferred from 64 California community colleges in 1994 and 1995.

## Method of Analysis

The data for this study were analyzed through various statistical methods. At the first stage, descriptive statistics were analyzed (e.g., frequencies, crosstabulations). At the second stage, exploratory factor analysis (EFA) was employed on the community college and four-year variables as a data reduction technique. The basic assumption of factor analysis is that underlying dimensions, or factors, can be used to explain complex phenomena. Since factor analysis entails the creation of factors comprised of more than one variable, this allows for the researcher to better understand and explain transfer students on a number of complex dimensions.

The extraction technique used was principal components analysis. An orthogonal rotation, the varimax rotation was employed to make the factors more interpretable and to achieve a simple structure. Factor loadings of .45 or higher were kept in the analysis, and those lower were dropped. A total of 19 factors were created. The factors represent attitudes and behaviors that characterize transfer students on a number of dimensions. Nine factors emerged within the community college environment and 10 factors in the four-year environment. Appendix A.1 to A.19 provides a description of the variables that comprise the factors, alpha reliability coefficients, and respective factor loadings. Composite scores for each group (i.e., younger and older) were calculated from the factors that emerged.

*Reliability Measures.* Reliability measures item consistency and the extent to which the item responses are consistent across constructs (Cresswell, 1994). The most widely used estimate of reliability, *internal consistency*, indicates the degree of homogeneity among the items in an instrument. Coefficient alphas were calculated for each factors. This method is used with instruments in which there is no right or wrong answer to each item. It is an appropriate type of reliability for attitude instruments and other measures that contain a range of possible answers for each item, such as degree-agree. Table 1 reports the reliability coefficients for the factors and the number of items that comprise each factor. Reliabilities for these factors range from .66 to .94. Finally, a *t* test of independent samples was used to test the null hypothesis. For this study, statistical significance was determined by probability values of less than $p<.05$.

## RESULTS

For this study 717 students responded (n=442 younger; n=275 older), which yielded a 30% response rate. The mean age is 22.27 for younger and 30.02 for older students. Overall, white students comprised 51%, followed by Asian (29%), Hispanic (14%), and African American (2%). Students in the "Other" category made up 3%. Women comprised 59% of the total sample. Over one-third of students had a reported parental income between $25,000-$59,000. In terms of degree aspirations, a little less than one-fourth indicated aspirations toward the doctorate.

### Community College Experiences

Since an important aspect of this study was to probe former transfer students' experiences while they attended community colleges, a section in the survey instrument was devoted to this

area. Questions about students' academic and social experiences and their involvement in numerous activities and campus services were included. Table 2 shows the mean differences between younger and older students on several community college experiences. In terms of students' academic achievement as measured by GPA, older students had a slightly higher average (3.44 versus 3.41), however the difference was not statistically significant. In terms of students' participation in an honors program, a statistically significant difference was found between the two groups, with the younger students being more likely to participate in honors programs when they attended a community college, compared to non-younger students.

Both groups of students spent about the same amount of time on the college campus, excluding time spent on classes. In time spent preparing for classes and working on a job for pay, a statistically significant difference was evident. Older students were more likely to devote more hours studying or preparing for classes and working on a job, compared to younger students.

Table 3 reports the statistically significant findings of students' involvement activities at the community college by age group. Younger students were likely to spend more time doing the following activities: socializing with friends, partying, doing volunteer work (or community service), participating in student clubs/groups, and watching TV. Conversely, older students were more likely than younger students to spend their time doing housework/childcare and doing independent research. Both findings were also statistically significant.

*General Perceptions*. The factor analysis results yielded five meaningful factors that measure students' general perceptions of courses, academic counseling, Transfer Center, activities prior to transferring, and perceptions of the four-year university (see Appendix A.5 to A.9 for a description of the variables that comprise each factor). The responses were based on a

four-point scale (1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly). The results yielded no statistically significant differences between younger and older students on the five factors that measure students' general perceptions in the community college environment.

*Quality of Effort*. In an effort to better understand transfer students at the University, four Quality of Effort scales were included in the instrument (see Appendix A.1 to A.4 for a description of the variables that comprise each factor). These scales derived from Pace's College Student Experiences Questionnaire (CSEQ, 1990) and Community College Student Experiences Questionnaire (CCSEQ, 1990). Specifically, the scales were: (1) course learning; (2) experiences with faculty; (3) experiences with clubs and organizations; and (4) experience in writing. Of the four scales, the results revealed statistically significant differences on three scales (see Table 4). Younger students were significantly more likely to have higher involvement and quality of effort with different aspects of clubs and organizations. Conversely, older students spend significantly more time and effort in their course learning and experience in writing. That is, older students are more likely to spend quality time in terms of their involvement in the class from taking notes to spending time mastering the course material. Further, these students spend more time revising papers and consulting with faculty for constructive criticism regarding writing assignments.

## University Experiences

At the University, older students have a higher GPA (3.23 versus 3.14). The GPA calculated was students' fourth quarter average. The results of the *t* test of independent samples revealed that this difference was statistically significant. In terms of the number of hours worked

per week at the University, a higher percentage of younger students worked less than 20 hours. Conversely, older students worked more than 20 hours (29.8% versus 18.8%).

Questions were posed that probed students' reasons for attending the University. For both younger and older students, half of the respondents indicated that an important reason for attending the University was to obtain a bachelor's degree, followed by the desire to pursue graduate or professional school. Further, older students had slightly higher responses to two items: to gain skills necessary to enter new job or occupation, and to satisfy a personal interest.

Among transfer students in the sample, 42% of younger and 46% of older students indicated that their majors were in the Social Sciences. For younger students, the second highest response was Life Sciences (25%), followed by Humanities (16%). Conversely, for older students the second highest response was Humanities (18%), followed by Life Sciences (14%).

Table 5 reports the statistically significant differences of reasons that influenced students' decision to attend the University by age group. Of the fourteen statements, statistically significant differences were revealed among four items. Among younger students, they were more likely to state that the reasons for attending the University were because of its social activities reputation, ranking in national magazines, and recommendation from parents. Conversely, an important reason among older students was that graduates gain admission to top graduate/professional schools.

Table 6 shows the mean differences in students' involvement activities at the University by age group. Of the 12 items, there were statistically significant differences on seven items. Younger students were more likely to have higher levels of involvement in the following: socializing with friends, partying, and participating in student clubs/groups. For older students,

they were more likely to have higher levels of involvement in doing housework/childcare activities, reading for pleasure, doing independent research, and commuting.

*Quality of Effort.* For the four-year environment, three Quality of Effort scales were used to investigate students' level of involvement and quality of effort in their academic and social experiences (see Table 7). The three scales included: (1) experiences with faculty; (2) experiences with clubs and organizations; and (3) course learning (see Appendix A.10 to A.12 for a description of the variables that comprise each factor). At the University, similar patterns were found for older students. That is, older students had higher involvement with faculty and in their course learning. On the other hand, younger students were more involved with clubs and organizations. These findings were all statistically significant.

*General Perceptions.* Table 7 presents the four factors that address the general perceptions of students at the University: satisfaction about the University, perceptions of faculty, stigma as transfer student, and competition and survival culture (see Appendix A.13 to A.16 for a description of the variables that comprise each factor). The results show that younger students scored significantly higher on three of the four factors. Compared to older students, younger students were more likely to perceive that faculty are more interested in their research than spending time with undergraduates, to feel a stigma because they were a transfer student, and to agree that there is a competitive nature between and among students that is not found at the community college. However, older students significantly agreed that they were satisfied with their overall experience.

*Adjustment Process.* There were three factors that measured students' overall adjustment process (see Appendix A.17 to A.20 for a description of the variables that comprise each factor). According to Table 7, there were no statistically significant differences on the three adjustment

dimensions (i.e., psychological, academic and social adjustment). In other words, both younger and older students were likely to have similar experiences in their adjustment processes at the University.

## DISCUSSION AND CONCLUSION

At the community college environment, both younger and older students were similar in their academic performance as measured by GPA. This finding suggests that both groups were performing successfully and at the same level. This finding is not surprising because a possible explanation of "no difference" is that being accepted to the University as a transfer student requires academic excellence. One way to measure excellence is by a student's GPA. Although one might expect age to influence academic performance, the results suggest that students have to perform well at the two-year college in order to meet the competitive GPA criteria for admission.

In terms of honors participation, it is not surprising that younger students were more likely than older students to participate in honors programs at the two-year college. Perhaps, this finding is supported by the fact that honors courses are usually offered during the day and not in the evening. Also, because older students spend significantly more time doing housework or childcare, they have less time to devote to participate in these types of programs.

It is clear based on the findings that the way in which students spend their time at the community college will differ significantly due to age. Compared to older students, younger students spend significantly more time in social-type activities (e.g., friends, partying, clubs/organizations) and in doing volunteer work. Perhaps, the lack of time devoted to these types of activities for older students is attributed to the fact that they spend significantly more

time working on a job for pay and in activities related to home and/or childcare. These types of activities will impact the extent to which a student will have free time to avail him or herself to activities at the college.

An analysis of the dimensions that measure students' general perceptions with courses, academic counseling, Transfer Center, activities prior to transfer, and perceptions of the four-year environment yielded no statistically significant differences. The results suggest that both groups shared similar perceptions and were in agreement about their experiences with courses at the two-year college, use of academic counseling and Transfer Center, involvement activities prior to transferring and overall perceptions of the four-year university.

One of the goals of the study was to assess students' quality of effort at the two-year college. Younger students scored significantly higher on their experiences with clubs and organizations factor. In other words, compared to their counterparts, younger students were likely to spend more time either holding an office in a club or organization and attending campus events sponsored by student organizations. An alternative explanation is that because older students worked more and had responsibility for housework and/or childcare, they had limited time to participate in extracurricular activities. Although the TSQ did not probe students' marital status, this finding supports the research by Choy and Premo (1995). In their study of non-traditional, they found that a majority of non-traditional undergraduates were married and had dependents other than a spouse. This finding suggests that non-traditional students are more likely than their counterparts (i.e., younger students) to be married and also to be supporting a family.

Older students scored significantly higher in the course learning and experience in writing factors. They were more likely to participate in class discussions, spend time thinking

about the applications of the material, and spend time integrating and synthesizing outside information with class material. Further, older students were significantly more likely to spend time writing papers and using various reference materials to improve the quality of their work. These findings suggest that older students tend to be more serious about their academic learning, especially when writing papers. Perhaps, a plausible explanation is that older students are returning to college to pursue long-held and highly-valued academic aspirations. Another possible explanation can be gleaned from the findings advanced by Richter-Antion (1986). Using the human capital hypothesis, the author found that older students are likely to have a strong consumer orientation and view education as an investment. Older students have strong feelings about investing in themselves and using education as a springboard for upward mobility, both financially and professionally. Moreover, older students tend to display certain characteristics that distinguish them from younger students. For example, Cross (1980) found that non-traditional students tend to be achievement-oriented and highly motivated. The findings that older students demonstrated significantly higher quality of effort in course learning and writing supports the work by Brenshoff (1991), who concluded that non-traditional students are more likely to prefer active approaches to learning and value opportunities to integrate academic learning with their life and work experiences.

At the University, older students had a significantly higher GPA (3.23 versus 3.14) than younger students. During their tenure at the University, older students were likely to work more hours on a job for pay compared to younger students. In terms of students' major, slightly more younger students majored in engineering and applied math. A substantially higher percentage of younger students majored in the life sciences (24.9% versus 13.8%). In comparison, a higher percentage of older students had majors in humanities, physical sciences, and social sciences. It

is difficult to make any inferences from these findings. However, further study on students' choice of major is warranted to determine the relationship between major and degree aspirations.

In terms of students' quality of effort at the University, the patterns are similar to the ones found in the community college environment. As had been the case at the two-year college, younger students scored significantly higher on the clubs and organizations dimension. This finding is supported by the fact that younger students were significantly more likely to respond that it was important to attend the University of its reputation for social activities. On the other hand, older students devoted significantly more effort to their experiences with faculty and course learning. Similarly, older students were more likely to feel comfortable approaching faculty and to spend time talking about class projects and writing assignments compared to younger students. These findings suggest that younger students are more likely to continue their social involvement at the four-year university and that older students are also more likely to direct their efforts into their course learning.

In terms of students' general perceptions of the University, younger students had significantly more agreement on three dimensions: perceptions of faculty, stigma of transfer student and competition and survival culture. That is, they were more likely to perceive that faculty are inaccessible to students, difficult to approach and more interested in research than spending time with undergraduates. Younger students were also more likely to perceive that because they were community college transfer students, most faculty and students tend to underestimate their abilities, and that there is a stigma among students for having started at a community college. Compared to older students, younger students were more likely to perceive that there is a competitive nature among students, students are more concerned about getting the grade instead of learning the material, and that students are treated like numbers in a book.

Conversely, older students were significantly more satisfied with their experience at the University, that is, they would recommend to other transfers to come to the University, and felt that the university is an intellectually stimulating and often exciting place to be. The finding that older students are more satisfied with their University experience supports the notion that these students are maximizing their opportunities to learn and partake of educational opportunities. Again, because older students tend to have a strong consumer-orientation in viewing education as an investment, they are less likely to take for granted the opportunities to excel in their courses and to be involved with professors.

The findings for student activities are also similar to the patterns found at the community college. Younger students significantly spent more time socializing with friends, partying and participating in student clubs/groups. On the other hand, older students spent significantly more time doing housework/childcare, reading for pleasure, doing independent research, and commuting.

In terms of students' reasons for attending the University, younger students were more likely to indicate that the reputation of the University's social activities and its ranking in national magazines were important reasons. Conversely, older students indicated that the reason for attending the University was because graduates gain admission to top graduate and professional schools. These findings were all statistically significant and suggest that younger students rank the social environment as more important than their counterparts do, while older students are influenced by the notion that graduating from the University will positively impact their future career plans.

There were three dimensions that measured students' adjustment process at the University: psychological, academic and social. The results show that there were no statistically

significant differences between younger and older students on all three dimensions. The findings suggest that both groups were likely to have similar experiences in terms of their overall adjustment process at the University. All students will have to encounter the new changes in the four-year environment and will have to learn how to make a successful transition academically, socially, and psychologically.

In summary, this study hypothesized that there is no difference between younger and older students in terms of academic achievement, level of involvement, quality of effort, general perceptions, and academic and social adjustment. The findings presented earlier suggest that younger students are likely to have different experiences at the two- and four-year environments compared to their counterparts. This study provides evidence that the Quality of Effort of students at the community college and the four-year university will differ due by age. Because of other interacting factors, students will, at younger ages, have a certain level of luxury in terms of time and energy. Also, when older students arrive at the four-year university, they have a distinct approach to learning compared to younger students. Perhaps increasing age is a motivating factor to stay focused and value available opportunities.

## IMPLICATIONS FOR PRACTICE

This study illustrates that students will have different college experiences and level of involvement in college activities. The development of meaningful factors (or dimensions) provides researchers the ability to operationalize and measure the attitudes and perceptions of students. This study supports the finding that older students are likely to have a different approach to learning and quality of effort in academic and social aspects. The behavior of students at the two-year college will likely be repeated when they arrive at the four-year

institution. Once at the University, students will have significantly different experiences in terms of their effort in academic and social dimensions and general perceptions. Academic counseling and student affairs professional can play an important role in fostering a positive transition to the university. For both older and younger students, adjusting to the new environment - socially, psychologically and academically will be similar for both groups.

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Table 1
Reliability Coefficients of Community College and University Factors

| Factor Name | Description | Alpha | # of Items |
|---|---|---|---|
| Community College Factors | | | |
| *Quality of Effort* | | | |
| CCFACULT | Discussions with Faculty | .92 | 12 |
| CCCLUBS | Participation in clubs and organizations | .94 | 10 |
| CCCRSLRN | Integration and discussion of course topics | .83 | 9 |
| CCWRITE | Discussions of written work with faculty | .81 | 8 |
| *General Perceptions* | | | |
| CCCOURSE | Courses at two-year | .89 | 7 |
| CCCOUNSL | Experience with academic counselors | .88 | 7 |
| CCTRNCTR | Transfer Center | .92 | 4 |
| CCACTIV | Involvement activities prior to transferring | .68 | 4 |
| CCPERCP | Perceptions of four-year prior to transferring | .72 | 4 |
| University Factors | | | |
| *Quality of Effort* | | | |
| UCFACULT | Discussions with faculty | .94 | 9 |
| UCCLUBS | Participation in clubs and organizations | .90 | 8 |
| UCCRSLRN | Integration and discussion of course topics | .82 | 8 |
| *General Perceptions* | | | |
| UCSATIS | Overall satisfaction with University | .88 | 4 |
| UCFACPER | Perceptions of Faculty | .84 | 4 |
| UCSTIGMA | Stigma as transfer student | .86 | 3 |
| UCCOMPTE | Competition and survival culture | .66 | 4 |
| *Adjustment Process* | | | |
| UCPSYCHO | Psychological adjustment | .75 | 4 |
| UCACAADJ | Academic adjustment | .71 | 5 |
| UCSOCADJ | Social Adjustment | .69 | 4 |

Table 2
Mean Differences of Community College Experiences by Age Group
(N=717)

| | Age Group | | | |
|---|---|---|---|---|
| **Community College Experiences** | **Younger** (n=442) | **Older** (n=275) | ***t*** | **df** |
| Community college GPA | 3.41 (3.49) | 3.44 (3.68) | -1.25 | 712 |
| Participated in Honors Program[1] | .19 (.40) | .12 (.33) | 2.74** | 660.86 |
| Hours per week spent on college campus, not including classes.[2] | 3.21 (1.63) | 3.13 (1.57) | .67 | 714 |
| Hours per week spent studying or preparing for class.[3] | 2.60 (1.29) | 2.80 (1.27) | -2.00* | 713 |
| Hours working on a job for pay.[4] | 3.51 (1.58) | 4.19 (1.83) | -5.28*** | 518.37 |

M and (SD). *p<.05; **p<.01; ***p<.001

[1] Yes/No
[2] Response based on 6-point scale (1=*none*; 2=*1 to 3 hours*; 3=*4 to 6 hours*; 4=*7 to 9 hours*; 5=*10 to 12 hours*; 6=*more than 12 hours*).
[3] Response based on a 5-point scale (1=*1 to 5 hours*; 2=*6 to 10 hours*; 3=*11 to 15 hours*; 4=*16 to 20 hours*; 5=*more than 20 hours*).
[4] Response based on a 6-point scale (1=*none. I didn't have a job*; 2=*1 to 10 hours*; 3=*11 to 15 hours*; 4=*16 to 20 hours*; 5=*21 to 30 hours*; 6=*more than 30 hours*).

Table 3
Mean Differences in Community College Weekly Activities by Age Group
(N=717)

| | Age Group | | | |
|---|---|---|---|---|
| Activity | Younger (n=442) | Older (n=275) | *t* | df |
| Socializing with friends | 4.77 (1.77) | 4.04 (1.61) | 5.52*** | 619.82 |
| Partying | 2.62 (1.65) | 2.25 (1.54) | 3.02** | 704 |
| Volunteer work (community service) | 2.24 (1.56) | 1.96 (1.33) | 2.57** | 636.78 |
| Student clubs/groups | 2.05 (1.41) | 1.61 (1.21) | 4.39*** | 637.11 |
| Watching TV | 4.16 (1.68) | 3.88 (1.68) | 2.15* | 711 |
| Housework/childcare | 2.83 (1.42) | 3.70 (1.99) | -6.27*** | 443.64 |
| Doing independent research | 1.62 (1.16) | 1.90 (1.40) | -2.71** | 494.96 |

M and (SD). *p<.05; **p<.01; ***p<.001

Note. Younger students were defined as those less than 25 years old; older students were defined as those 25 years of age or older. Responses were based on an 8-point scale (1=*none*; 2=*less than 1 hour*; 3=*1-2 hours*; 4=*3-5 hours*; 5=*6-10 hours*; 6=*11-15 hours*; 7=*16-20 hours*; 8=*over 20 hours*).

Table 4
Mean Differences on Quality of Effort at Community College by Age Group
(N=717)

| Factors | Age Group: Younger (n=442) | Age Group: Older (n=275) | *t* | df |
|---|---|---|---|---|
| ***Quality of Effort*** | | | | |
| Experiences with Faculty✚ | 27.47 (8.23) | 28.09 (8.70) | -.95 | 704 |
| Clubs and Organizations✚ | 18.51 (8.27) | 17.15 (7.96) | 2.16* | 705 |
| Course Learning✚ | 27.84 (5.08) | 28.75 (5.38) | -2.29* | 709 |
| Experience in Writing✚ | 24.80 (5.02) | 25.93 (4.44) | -3.12** | 624 |

M and (SD). *p<.05; **p<.01; ***p<.001

✚ Never – Very often

Table 5
Mean Differences of Reasons for Attending University by Age Group
(N=717)

| | Age Group | | | |
|---|---|---|---|---|
| **Reasons for Attending University** | **Younger** (n=442) | **Older** (n=275) | ***t*** | **df** |
| Social activities reputation. | 2.20 (1.10) | 1.76 (.99) | 5.59*** | 628.91 |
| Graduates gain admission to top Graduate/professional schools. | 2.81 (1.11) | 2.99 (1.05) | -2.23* | 601.15 |
| Ranking in national magazines. | 2.82 (1.13) | 2.60 (1.15) | 2.47** | 710 |
| Parents recommended that I attend. | 2.31 (1.12) | 1.58 (.97) | 8.81*** | 666.11 |

M and (SD). *p<.05; **p<.01; ***p<.001

Note: Responses were based on a 4-point scale (1=*not important*; 2=*somewhat important*; 3=*important*; 4=*very important*).

Table 6
Mean Differences in University Weekly Activities by Age Group
(N=717)

| | Age Group | | | |
|---|---|---|---|---|
| | Younger | Older | | |
| **Activity** | (n=442) | (n=275) | *t* | **df** |
| Socializing with friends | 4.47 | 3.79 | 5.88*** | 642.35 |
| | (1.65) | (1.41) | | |
| Partying | 2.65 | 2.06 | 5.10*** | 640.96 |
| | (1.62) | (1.39) | | |
| Student clubs/groups | 2.06 | 1.43 | 7.16*** | 707.99 |
| | (1.45) | (.91) | | |
| Housework/childcare | 2.61 | 3.79 | -8.34*** | 437.38 |
| | (1.43) | (2.04) | | |
| Reading for pleasure | 2.25 | 2.50 | -2.41* | 707 |
| | (1.29) | (1.36) | | |
| Doing independent research | 2.13 | 2.49 | -2.64** | 536.23 |
| | (1.64) | (1.81) | | |
| Commuting | 3.50 | 3.95 | -3.54*** | 640.90 |
| | (1.84) | (1.58) | | |

M and (SD). *p<.05; **p<.01; ***p<.001

Note. Younger students were defined as those less than 25 years old; older students were defined as those 25 years of age or older. Responses were based on an 8-point scale (1=*none*; 2=*less than 1 hour*; 3=*1-2 hours*; 4=*3-5 hours*; 5=*6-10 hours*; 6=*11-15 hours*; 7=*16-20 hours*; 8=*over 20 hours*).

Table 7
Mean Differences on University Factors by Age Group
(N=717)

| Factors | Age Group: Younger (n=442) | Age Group: Older (n=275) | *t* | df |
|---|---|---|---|---|
| ***Quality of Effort*** | | | | |
| Experiences with Faculty+ | 21.53 (7.52) | 22.73 (7.12) | -2.12* | 703 |
| Clubs and Organizations+ | 15.88 (7.11) | 13.55 (5.94) | 4.70*** | 653.76 |
| Course Learning+ | 25.22 (4.73) | 25.99 (4.50) | -2.12* | 702 |
| ***General Perceptions*** | | | | |
| Satisfaction about University++ | 13.42 (2.81) | 13.97 (2.58) | -2.60** | 696 |
| Perceptions of faculty++ | 9.55 (3.01) | 8.88 (3.12) | 2.81** | 695 |
| Stigma as transfer student++ | 6.03 (2.59) | 5.34 (2.39) | 3.52*** | 685 |
| Competition and survival culture++ | 15.82 (2.33) | 15.29 (2.53) | 2.76** | 519.76 |
| ***Adjustment*** | | | | |
| Psychological adjustment++ | 9.00 (3.09) | 8.65 (2.99) | 1.51 | 710 |
| Academic adjustment++ | 14.94 (3.60) | 14.75 (3.36) | .73 | 701 |
| Social adjustment++ | 9.17 (2.92) | 9.16 (2.63) | .02 | 706 |

M and (SD). *p<.05; **p<.01; ***p<.001

+ Never – Very often
++ Disagree strongly – Agree strongly